User Manual

FireAngel®

WIRELESS INTERLINK

SMOKE ALARM + 10 YEAR LIFE

WST-630

THERMOPTEK™

Please read me – as I could save your life.

Please retain this user manual for future reference

Are you protected from deadly carbon monoxide?

For a full range of carbon monoxide alarms
visit **www.fireangel.co.uk**

CONTENTS

INTRODUCTION	**2**	LED INDICATORS	**11**
AUTOMATIC POWER ENGAGE	**2**	ALARM TEST	**12**
SENSOR TECHNOLOGY	**2**	ALARM SMART SILENCE™	**12**
APPLICATION	**3**	ROUTINE MAINTENANCE	**14**
POSITIONING	**4**	WHAT TO DO IN CASE OF A FIRE IN YOUR HOME	**14**
LIMITATIONS	**6**		
HOW TO INSTALL YOUR SMOKE ALARM 1. Preparation 2. Install Mounting Plate 3. Fit Your Smoke Alarm 4. Test Your Smoke Alarm	**7**	REPAIR	**15**
		TROUBLESHOOTING	**16**
		DISPOSAL	**19**
		HOW TO MAKE YOUR HOME SAFER	**19**
INTERLINKING YOUR WST-630 SMOKE ALARMS	**8**	WARRANTY	**21**
OPERATION Normal Condition Low Power Pack Condition	**10**	RETURNS	**22**
		PRODUCT RANGE	**22**
		NOTES	**23**

Note: This User Manual is also available in large text and other formats. Please call **0800 141 2561** for further information

INTRODUCTION

Congratulations! You've made a wise investment in protecting your family and home. The FireAngel WST-630 wireless interlink multi-criteria high performance detector is the ultimate alternative to traditional alarms. Ground breaking Thermoptek™ technology combines the very latest in optical sensing with thermal enhancement, providing fast response to both fast flaming and smouldering fires , eliminating the need for ionisation sources which can be harmful to the environment.

Up to a maximum of fifty WST-630 alarms can be wirelessly interlinked, creating a network. If any smoke alarm sounds, it triggers all other alarms in its network to sound simultaneously. This provides the earliest possible warning of a fire.

Alarm signals are passed between all WST-630's in the network, increasing the network range and reliability.

The FireAngel range of products is constantly being improved and expanded. Please visit our website www.fireangel.co.uk to find out about the latest additions to our range and in particular our new range of wireless Wi-Safe 2 products.

IMPORTANT: This user manual contains important information regarding the operation of your FireAngel smoke alarm. Ensure you read this user manual fully before installing and operating the alarm. If you are installing this smoke alarm for use by others, you must leave this manual (or a copy of it) with the end user.

AUTOMATIC POWER ENGAGE

Your 10 year life smoke alarm is powered by an internal lithium power pack which is supplied in a deactivated state. The power pack is automatically enabled when the alarm is fully locked on to the mounting plate and disabled when removed.

IMPORTANT: Your alarm will not work until it is correctly located and secured onto the mounting plate

SENSOR TECHNOLOGY

Traditionally 3 types of sensor technology have been used in domestic self-contained fire alarms. Optical smoke alarms are typically more effective at detecting slow burning fires, which can smoulder for hours before bursting into flames. Ionisation smoke alarms are generally more effective at detecting fast, flaming fires which consume combustible materials rapidly and spread fire quickly. Heat alarms are triggered when room temperature reaches a set point (typically 56˚C). These alarms are generally used in locations where other alarm types are not suitable, such as kitchens.

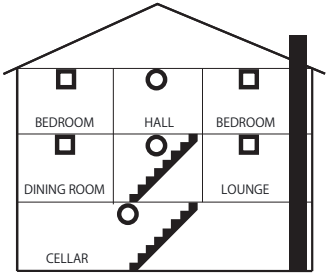
THERMOPTEK™SENSOR TECHNOLOGY

The state of the art thermally-enhanced optical sensing chamber provides a fast reaction to both slow smouldering and fast flaming fires in a single alarm. The Thermoptek™ technology constantly monitors temperature changes and if a rate of temperature rise is detected the sensitivity of the alarm is increased meaning it has a fast response time to fast flaming fires as well as slow smouldering fires.

APPLICATION

WARNING: Your FireAngel smoke alarm can be installed into a new build property as additional protection to an existing smoke detection system only. It cannot be used as a substitute for a hard wired system as required in new build properties. In this type of property the building regulations require alarms to be interlinked. You can obtain further information from your local fire service or building control department at your local council offices. These sources generally provide advice on new builds or projects that require planning permission. Your smoke alarm typically meets the minimum requirements for family living units in existing buildings, as long as at least one unit is installed on each floor/level of your property. In order to achieve the earliest fire warning, we recommend that a smoke alarm is fitted in all rooms where the temperature is normally between 4°C (40°F) and 38°C (100°F). Check the section on 'Positioning' to ensure that the smoke alarm is to be correctly positioned for the particular dwelling into which it is intended to be installed.

WARNING: The alarm positions shown below are based on typical homes. Construction and layout of individual dwellings will vary, so this should be regarded only as a guide. Check with your local fire station for further guidance.



EXISTING HOMES

MINIMUM RECOMMENDATIONS

RECOMMENDED FOR ADDITIONAL PROTECTION

NOTE: Kitchens should be covered by a self contained heat detector.

The FireAngel WST-630 is designed to be wirelessly interlinked with other WST-630 smoke alarms. The WST-630 is not designed to communicate with wireless smoke alarms from other ranges or manufacturers.

Multi-family or mixed occupant residence

(Tenancy building, student accommodation)

Your FireAngel smoke alarm can also be used in individual flats and bedsits, providing the same conditions are met as for a single-family residence. However, there must already be a primary fire detection system that meets regulatory requirements for common areas such as lobbies and hallways

Institutions and Hotels
This includes motels, hospitals, day care facilities, long-term health care facilities, boarding houses and dormitories. Your WST-630 smoke alarm can be used in individual sleeping/resident rooms, providing the same conditions are met as for a single-family residence. However, there must already be a primary fire detection system that meets regulatory requirements for common areas such as lobbies and hallways. Use of the WST-630 smoke alarm in common areas may not provide sufficient fire warning to residents or meet regulatory requirements.

Mobile Homes and Caravans
This smoke alarm is suitable for use in mobile homes and caravans.

Commercial and Industrial Premises
This smoke alarm is not intended for any non-residential, commercial or industrial application, nor for any other purpose than described above.

POSITIONING

Thermoptek™ smoke alarms are less prone to false alarms from cooking fumes, and are therefore suitable for locations near kitchens. However like other types of smoke alarms, Thermoptek™ smoke alarms can be susceptible to nuisance alarms from steam and should not be located too close to bathrooms and showers.

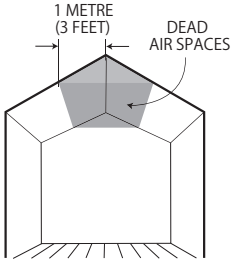
It is recommended that your FireAngel smoke alarm is **NOT** to be fitted in the following locations:

- Bathrooms, shower-rooms, and other very damp or humid areas, where the moisture can cause unwanted alarms.
- Kitchens. Kitchen areas should be protected with self-contained Heat Alarms, as the combustion particles from cooking in kitchens will result in unwanted alarms and permanent contamination of the smoke alarm's sensor.
- In areas where excessive dust or dirt could contaminate the sensing chamber, making it over sensitive or impairing smoke entry.
- In areas where the ambient temperature is not controlled and may regularly drift below 4°C (40°F) or above 38°C (100°F) e.g. unheated buildings, open attic spaces.
- Very dirty, dusty or greasy areas.
- In very draughty areas, such as close to ceiling fans or fresh air vents. Draughts can blow smoke away from the alarm.

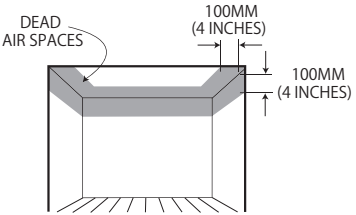
- In insect infested areas. Insects can clog openings to the sensing chamber, preventing smoke entry or causing unwanted alarms.
- Within 30cm (12") of a fluorescent light fitting which emits electrical 'noise' that can prevent correct alarm operation.
- In wall positions that are more than 30cm (12") away from the ceiling (see 'How to install your smoke alarm').
- In 'dead air' spaces (see following diagram).
- Within 30cm (12") of light fittings or other ceiling based obstructions.

WARNING: Prolonged exposure to temperatures outside those stated above will reduce product life.

IMPORTANT: Obstructions such as steel reinforcement in concrete could block or impede the wireless signal. While the wireless range is over 200 metres in clear air / clear line of sight, the effective range may be reduced by wall and other obstructions in the building. Always ensure that after any building work or after repositioning large items of furniture (beds, sofas, shelving units etc.), you carry out an alarm test on all networked smoke alarms to ensure they are all still working. It is recommended not to exceed 35m as the maximum distance between smoke alarms in the network.



BEST LOCATION
(IN CENTRE OF CEILING)



Note: Up to fifty WST-630 smoke alarms and/or Wi-Safe 2 accessories can be learned in to a single network.

WHAT ARE THE LIMITATIONS OF MY SMOKE ALARM?

Your FireAngel smoke alarm is designed to alert you by sounding an alarm when it senses smoke, i.e. it can only sense smoke and alert you if smoke reaches it. If a fire develops in an area remote from the location of the smoke alarm, such as another room or another level, smoke may not reach the smoke alarm in sufficient time or quantity to sense and alert you to the danger. We recommend that as a minimum you install Thermoptek™ smoke alarms on every floor of your property. For comprehensive coverage a smoke alarm should also be fitted in every room. This smoke alarm cannot be used to provide primary fire detection in common areas used by different residents such as blocks of flats and hotels. The FireAngel smoke alarm may not alarm before a fire causes damage, injury or death, as the smoke may not reach the smoke alarm in time. Examples include smoking in bed and violent gas explosions. This smoke alarm may not respond in a reasonable time if it is not installed in the best position, or if furniture or other obstacles are located between the smoke alarm and the fire.

WARNING: Your smoke alarm will not operate without sufficient power. As the alarm's power pack reaches the end of its life a low power warning chirp will be emitted approximately every 45 seconds. When this occurs you are strongly recommended to replace the unit within 7 days.

IMPORTANT: Smoke alarms are designed to alert you with an audible alarm at a level specified by the European Standard EN 14604:2005. Closed doors, walls and high ambient noise levels will reduce this level. Temporary or permanently impaired hearing may result in the alarm not being heard. Stereos, traffic and other loud sources may also prevent the alarm being heard.

Heavy sleepers and residents under the influence of alcohol or drugs may also not hear or respond to the alarm. Test and check that you can hear the alarm in all circumstances. If in doubt install additional smoke alarms as required.

WARNING: The WST-630 Smoke alarm is not suitable for alerting hard of hearing or deaf residents. It may be interlinked with a product from the FireAngel Wi-Safe 2 range which is designed specifically for the hard of hearing. See www.fireangel.co.uk for specially designed warning systems for the hard of hearing or deaf such as a vibrating pillow pad or flashing strobe. We recommend that where required, warning systems be installed that will alert hard of hearing or deaf residents.

WARNING: The smoke alarm accompanying this manual employs the latest technology and is independently tested as being compliant with all the relevant European Standards. However,

as with any electronic product it may fail and may not sense all types of fire within sufficient time to alert you of the danger and provide adequate time for your escape. In order to maximise your level of safety always test your smoke alarm frequently to ensure it is in full working order. Your FireAngel smoke alarm is only suitable for use in domestic/ residential applications as covered in this manual. It is not suitable for commercial or industrial applications. It is designed to sense smoke and alert you. It will not sense carbon monoxide, flames, or gas. It will not prevent or extinguish fires.

This FireAngel smoke alarm has a limited life of 10 years and should not be considered as a substitute for life or property insurance. Like all electronic equipment, it can wear out or fail. It should be tested weekly and replaced immediately in the event of failure, and replaced every 10 years regardless.

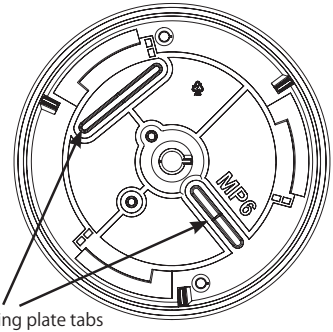
HOW TO INSTALL YOUR SMOKE ALARM

IMPORTANT: Make sure you have read and understood this manual before installing your smoke alarm.

1. Preparation

The mounting plate should be attached to the ceiling or wall.

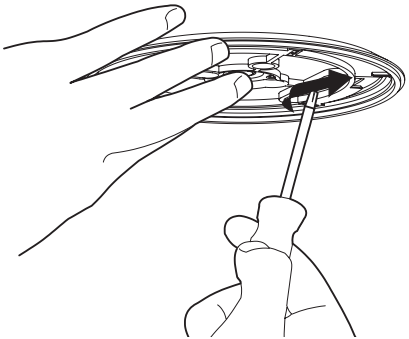
Break out the tabs from the mounting plate. Use the fixing slots on the mounting plate as a guide when marking the position of the drill holes. With an appropriately sized drill, drill the holes and insert the plastic fixing anchors supplied (if required).



Mounting plate tabs

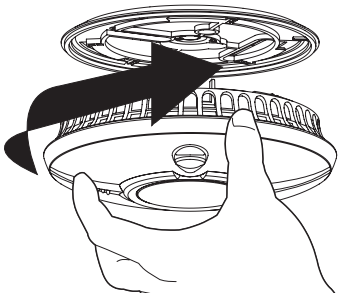
2. Install Mounting Plate

Fit the mounting plate to the ceiling or wall using the screws provided.



3. Fit Your FireAngel Smoke Alarm

To fit to the mounting plate included in this pack, position the alarm on the mounting plate then twist it clockwise until the alarm is locked in position. Make sure the alarm is twisted on fully.



The power pack will now activate. The red LED (visual indicator) on the front of the alarm should flash approximately once every 45 seconds to show that it is active.

WARNING: Removing the smoke alarm from its mounting plate will de-activate the unit and prevent it from detecting smoke.

4. Test Your FireAngel Smoke Alarm

After fitting the alarm to the mounting plate, wait for 5 seconds for the alarm to settle then test the alarm. See 'Alarm Test' on page 12.

INTERLINKING YOUR WST-630 SMOKE ALARMS

This smoke alarm contains an inbuilt RF module, and enables you to wirelessly interlink two or more smoke alarms and create a network. Therefore WST-630 alarms need to be "learned in" or interlinked in order to communicate with each other. If one alarm activates, all other interlinked smoke alarms will also sound. Note that WST-630s can only be interlinked with other WST-630s and products within the FireAngel Wi-Safe 2 range.

"Learning in" (interlinking) your Smoke Alarms:

The process below describes 'learning in' two alarms into a network, "Alarm 1" and "Alarm 2".

1. Alarm 1

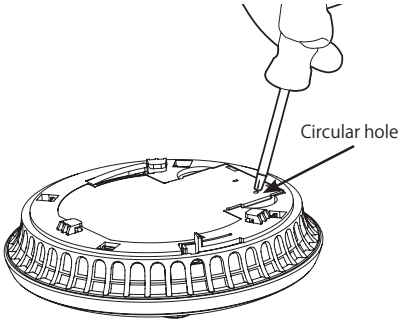
Install Alarm 1 as described on page 7.

2. Alarm 2

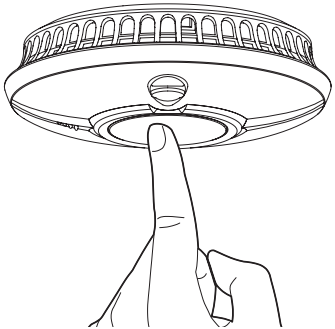
Install the mounting plate for Alarm 2 in one of the recommended locations (see Positioning on page 4) Do not fit the second alarm to its mounting plate yet.

3. Alarm 2

Using a pen, a very small screwdriver or paper clip that has been opened out, briefly push and release the learn button located in a circular hole in the back of Alarm 2.

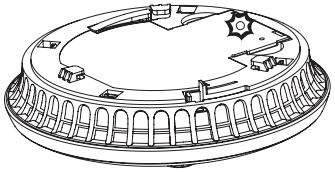


The red LED next to the learn button will flash briefly then light up for approximately five seconds to show that it is ready to receive the "learn in" signal. During the next five seconds you will need to briefly press the test button on Alarm 1 to wirelessly interlink the two alarms.



Alarm 1:
will give an audible sound consisting of 2 cycles of 3 loud beeps.

Alarm 2:
The red LED on the wireless module of alarm 2 will flash to indicate that it has been "learned-in" successfully.



Note: If the test button is not pressed quickly enough (before the red LED on the wireless module of Alarm 2 has extinguished), the learn-in process will fail. If this happens, repeat the process again, as described above.

5. Fit Alarm 2 onto its mounting plate to complete the installation.

6. Additional alarms should be "learned-in" the same way. When learning in additional alarms, any alarm already in the network, can be used as 'Alarm 1'. This means that you can "learn-in" the additional alarm into any alarm already in the network. It will then become part of the whole network. You do not have to "learn it in" into each alarm in the network.

7. After completing the "learn-in" procedure, test the alarms as described in "alarm test".

If any interlinked alarm fails to respond to the "alarm test", remove it from its mounting plate and repeat the learning in process.

OPERATION

Normal Condition
The red LED on the front will flash approximately every 45 seconds to show that the alarm is active.

Low Power Pack Condition

IMPORTANT: Your smoke alarm requires the power pack to have sufficient capacity of power to operate correctly. Should your FireAngel smoke alarm enter a low power pack condition, the unit will emit an audible 'chirp' approximately once every 45 seconds and the amber LED will flash at around the same time. When this occurs it is strongly recommended you replace the alarm immediately and in any event within 30 days.

Your FireAngel smoke alarm will continue to warn of this low power pack condition for at least 30 days. However, failure to change the alarm after this time would mean your smoke alarm may have insufficient power to alert you in a real fire situation. When the alarm is removed from the mounting plate the power pack will automatically deactivate and the low power warning chirp will stop, allowing you to dispose of the alarm.

IMPORTANT: If your WST-630 smoke alarm enters a low power pack condition, it will emit an audible "chirp" approximately once every 45 seconds. All other WST-630 alarms in the network will also emit an audible low battery chirp once every 4 hours. This will continue until the smoke alarm which has the low battery condition is removed.

Fault Indication
If the amber LED flashes and an audible 'chirp' is heard at a different time, this indicates that there is a fault; the unit may not detect smoke and may not go into alarm in the event of a fire. If this occurs it is strongly recommended that you replace the alarm immediately.

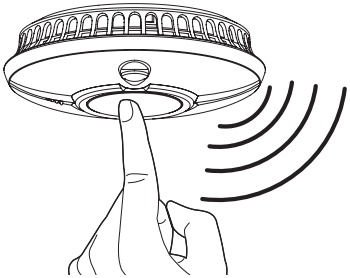
Alarm condition
If the WST-630 goes into alarm, all interlinked alarms will also sound 3 loud beeps which continually repeat until the cause of the alarm being activated is found and resolved. The red LED will only flash rapidly (once per second) on alarms that have responded directly to smoke.

WST-630 LED Indicators				
Red LED	**Yellow LED**	**Audible signal**	**Status**	**Action required**
Flashes once continuously every 45 secs			Normal operation	
Flashes every second		3 loud beeps repeating	Alarm	Check if there is a fire hazard and vacate property
Flashes once every 45 seconds		3 loud beeps repeating	Other WST-630 in network in alarm	Check if there is a fire hazard and vacate property
Flashes once every 10 seconds for up to 10 mins			"Smart silence" Alarm has reduced sensitivity	This will be as a result of you silencing a false alarm. Sensitivity will return to normal within 10 mins
Flashes once every 45 seconds	Flashes at the same time as the red LED see note	Single chirp at the same time as the LED flash	Low powerpack	Replace within 30 days
Flashes once every 45 seconds	Flashes once every 45 seconds, 20-25 seconds after the red LED	Single chirp at the same time as the red LED flash	Fault	Call FireAngel Technical support if within warranty. If not replace alarm immediately
Flashes once every 45 seconds		Single chirp every four hours	Other alarm in network has low powerpack	Locate alarm with low powerpack and replace
Flashes once every 45 seconds	Double flashes at the same time as the red LED see note	Single chirp at the same time as the LED flash	Radio module low battery	Call FireAngel Technical support if within warranty. If not replace alarm immediately
Flashes once every 45 seconds	Double flashes every 45 seconds, 20-25 seconds after the red LED	Single chirp at the same time as the red LED flash	Radio module fault	Call FireAngel Technical support if within warranty. If not replace alarm immediately

Note: The yellow LED may flash twice on the WST-630, indicating that the fault is with the wireless module. In this event, the complete WST-630 alarm should be replaced.

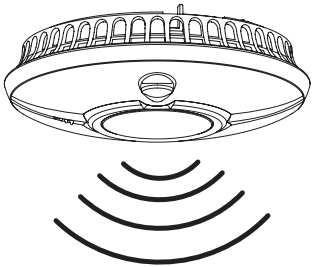
ALARM TEST

a) Briefly press the test button in the centre and release.



b) The unit will give an audible alarm consisting of 2 cycles of 3 loud beeps, then stop automatically.

c) The red LED on the alarm will flash rapidly during the audible signal.



NOTE: The test button tests the alarm's smoke sensing circuit. There is no need to test your alarm with smoke. If your smoke alarm fails to give an audible test signal, please refer immediately to the trouble shooting guide at the end of this manual.

WARNING: As with all electronic alarm products you should test your smoke alarm every week.

If your WST-630 is interlinked with other smoke alarms, we recommend that every individual smoke alarm is tested during the weekly test.

a) Briefly press the test button in the centre of the smoke alarm and release.

b) The unit you are testing will give an audible alarm consisting of 2 cycles of 3 loud beeps, then stop automatically. The red LED on this alarm will flash rapidly (once per second) during the audible alarm. All interlinked alarms will give an audible alarm consisting of 2 cycles of 3 loud beeps, then stop automatically, indicating the test is complete. The red LED on all interlinked alarms will not flash rapidly. If any alarm fails to self-test, see Troubleshooting on page 16.

ALARM SMART SILENCE™

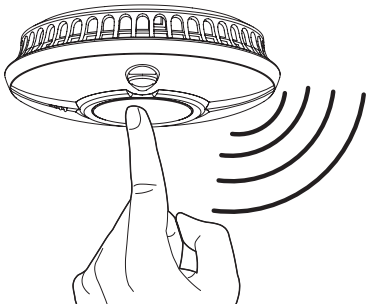
DANGER: If your FireAngel smoke alarm emits the full alarm signal and you are not testing the unit, the smoke alarm is warning you of a potentially dangerous situation that requires your immediate attention. Only use the alarm silence function after making sure that there is no fire. Do not block the vents

on the alarm or disable the smoke alarm in any way, as this will remove your protection. Smoke alarms can sometimes react to cooking fumes or other non-emergency situations.

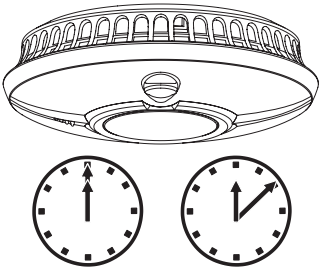
Your smoke alarm features "Smart Silence™" technology. In the event of a known false alarm your smoke alarm can be temporarily silenced by briefly pressing the central test button. Your alarm will automatically return to full sensitivity within 10 minutes.

NOTE: If the level of smoke reaching the alarm is very high the alarm silence will be overridden and the alarm will continue to sound.

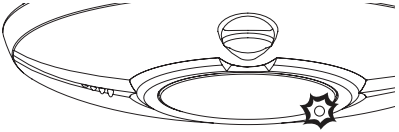
1. Briefly press and release the test button. The alarm sound will soon stop.



2. Your alarm will silence and enter into a reduced sensitivity mode for approximately 10 minutes.



3. During the reduced sensitivity mode the red LED on your alarm will continue to flash more rapidly than normal, approximately once every 10 seconds.



4. Your alarm will automatically return to full sensitivity after a maximum of 10 minutes and the red LED will revert to flashing once every approximately 45 seconds.

DANGER: Never ignore any alarm. Ignoring the alarm may result in injury or death. If your smoke alarm activates and alarms and you are not absolutely certain of the source of the smoke, get everyone out of the house immediately.

If your WST-630 is interlinked with other alarms, pressing the test button will also silence other alarms in the network. However, any alarm that has sensed smoke

(an instigating alarm) cannot be remotely silenced. This means that any alarm that has sensed smoke will continue to sound allowing you to locate it.

If any instigating alarm in the network has not been silenced after a short period (2-4 minutes), all other alarms will start sounding again to alert you.

WARNING: If any alarm in the network is sounding, it is warning you of a potentially hazardous situation. Do not ignore it.

ROUTINE MAINTENANCE

Your FireAngel smoke alarm has been designed to be as maintenance-free as possible, however there are several things you must do to keep it working properly.

CAUTION: Your FireAngel smoke alarm is a sealed electrical device and no attempt should be made to open the case. Attempting to open the case will invalidate your Warranty.

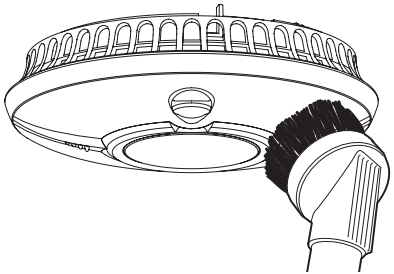
WARNING: This device contains a powerful lithium battery. If tampered with , the battery may be shorted and create a fire hazard. Never attempt to open or damage the battery.

Testing

Test your smoke alarm once every week, see section 'Alarm Test' on page 12. Any test failures should be reported to the FireAngel Technical Support Team see page 18.

Cleaning

As a minimum your smoke alarm should be cleaned once every 3 months using your vacuum cleaner fitted with the soft brush attachment.



WARNING: Your FireAngel smoke alarm may false alarm when it is being cleaned using a vacuum cleaner.

IMPORTANT: Do not use solvents or cleaners on your FireAngel smoke alarm, as they may cause damage to the sensor or circuitry. The unit can be wiped with a slightly damp cloth.

CAUTION: Do not paint the smoke alarm as this may block the openings and prevent smoke from entering the sensor.

WHAT TO DO IN CASE OF A FIRE IN YOUR HOME

- If you have made a family escape plan and practiced it with your family, you have increased their chances of escaping

safely. Go over the following rules with your children each time you have fire drills. This will help everyone remember them in case of a real emergency.

- Don't panic, stay calm. Your safe escape may depend on thinking clearly and remembering what you have practiced.
- Notify every member in the household.
- Get out of the house as quickly as possible. Follow a planned escape route. Do not stop to collect anything or to get dressed.
- Feel the doors with the back of your hand. If they are hot, do not open them – use an alternative escape route.
- Stay close to the floor. Smoke and hot gases rise.
- Cover your nose and mouth with a cloth (wet if possible). Take short, shallow breaths.
- Keep doors and windows closed. Open them only if you have to in order to escape.
- Meet at your planned meeting place after leaving the house. Carry out a head count.
- Call the Fire and Rescue service on 999 as soon as possible from outside your house. If possible use a neighbours phone or call box rather than a mobile phone (as the location can be traced from the number if the line is lost, or the battery runs out for example).
- Give the address and your name.
- Never go back inside the building until a member of the fire service has told you it is safe to do so.

REPAIR

DO NOT attempt to repair your FireAngel smoke alarm as doing so will invalidate your warranty. If your smoke alarm is not operating properly, see the next section 'Troubleshooting'. If you cannot solve the problem, please call the FireAngel Technical Support Line see page 18. If your FireAngel smoke alarm is no longer under warranty, replace immediately with a comparable FireAngel brand smoke alarm.

WARNING: This device contains a lithium battery. If tampered with, the battery may be short circuited and create a fire risk. Never attempt to open or damage the alarm.

Always avoid dropping, or damaging the alarm, or short-circuiting the power pack. As with any electrical device which has its own power supply the alarm should be treated with respect and in accordance with the manufacturer's guidance particularly after it has been uninstalled.

If your smoke alarm is dropped or damaged, as a precaution, it should be removed from the building and you should contact FireAngel Technical Support on 0800 141 2561 or technicalsupport@fireangel.co.uk

TROUBLESHOOTING

Problem	Solution
Your FireAngel smoke alarm does not sound during testing	• Make sure the alarm has been rotated clockwise as far as it can go and is securely located on its mounting plate. • If testing immediately after first activating the alarm, you should allow a few seconds for the alarm to settle before testing. • Make sure you push the centre of the test button firmly. • If the unit has been silenced and is in low sensitivity mode it may not test. Wait 15minutes then try again. • If the alarm has been recently fitted and it still fails to self test then contact technical support (see page 18). • Check positioning. The wireless signal might be blocked or out of range. • If you are in the process of learning in the alarm and it does not test – repeat the process. • If the alarm still fails to self test, please contact technical support (see page 18).
Your FireAngel smoke alarm cannot be removed from its mounting plate	If you find that you cannot remove the smoke alarm from its mounting plate, the locking mechanism may have been engaged. Undue force may result in damage to the smoke alarm or the mounting plate or both. For more information contact your installer, or contact FireAngel Technical Support Team between **9am - 5pm Monday – Friday.** Telephone: **0800 141 2561** or e-mail: **technicalsupport@fireangel.co.uk**

Problem	Solution
Your FireAngel smoke alarm chirps intermittently	• Check the location of your smoke alarm (see 'Application & Positioning') • Check that your smoke alarm is definitely the source of chirping; make sure the noise isn't coming from another alarm (smoke/carbon monoxide/burglar/gas alarm) by process of elimination. • If the alarm is chirping once approximately every 45 seconds and the amber led is flashing around the same time, it indicates that the power pack is low. The unit should be replaced within 30 days. • If your smoke alarm is chirping once every 4 hours, it is indicating that another alarm in the network has entered a low power pack condition. Locate the alarm with the low battery condition and replace the alarm as soon as possible and in any event within 30 days.
Your FireAngel smoke alarm activates when no smoke is visible	• Check the location of your smoke alarm (see the section on 'Positioning') • Clean the smoke alarm (see the section on 'Routine Maintenance') • If the alarm is sounding but the red LED is only flashing approximately once every 45 seconds, this indicates that an inter-linked alarm has detected smoke. Vacate property if there is a fire hazard.

Problem	Solution
Other interlinked units fail to silence when one unit is silenced	• Interlinked units that have sensed smoke can't be silenced. If one or more unit remains in alarm, all other interlinked units will emit their audible warning again within 4 minutes. Vacate property if there is a fire hazard.
You experience frequent unwanted alarms	Check the location of your FireAngel smoke alarm (see the section on 'Positioning') • Clean the smoke alarm (see the section on 'Routine Maintenance') • Any activated alarm will cause other interlinked alarms to sound. Carry out these checks on the activated alarms in particular (red LED flashing rapidly during alarm). • If the frequent unwanted alarms continue contact technical support for advice
The yellow LED is flashing and the alarm is making a "chirping" sound	• If the yellow LED is flashing at around the same time as the chirp, this indicates a low power pack condition and the alarm should be replaced as soon as possible and certainly within 30 days. • If the yellow LED is flashing at a different time to the chirp, this indicates a fault and the alarm should be replaced as soon as possible. • If the yellow LED is double flashing and the alarm is making a "chirping" sound, this indicates that the wireless module has a low power pack condition, or is faulty. The alarm should be replaced as soon as possible.
If the alarm fails to operate correctly, the advice of the manufacturer should be sought	If you have any questions about the operation of your alarm, please contact the FireAngel Technical Support Team between **9am - 5pm Monday – Friday.** Telephone: **0800 141 2561** or e-mail: **technicalsupport@fireangel.co.uk** You can also visit the support section of our website **www.fireangel.co.uk**

DISPOSAL

Waste electrical products should not be disposed of with your other household waste. Unlike ionisation smoke alarms your Thermoptek™ alarm does not contain any radioactive material. This means that the alarm is ideally suited for disposal within the waste electronic and electrical equipment (WEEE) recycling scheme. Please recycle where facilities exist. Check with your local authority, retailer or contact our technical support team for recycling/disposal advice as regional variations apply. Once the alarm is removed from the mounting plate the internal power pack (battery) will be deactivated. The unit is now ready for disposal.

WARNING: Do not attempt to open

WARNING: Do not burn or dispose of in fire

WARNING: If your smoke alarm is dropped or damaged, as a precaution, it should be removed from the building and you should contact FireAngel Technical Support on 0800 141 2561 or technicalsupport@fireangel.co.uk

HOW TO MAKE YOUR HOME SAFER

Installing smoke alarms is only one step in protecting your family from fires. You must also take steps to reduce the chances of fires starting in your home. If a fire does start, you must increase your chances of escaping.

To have a good fire safety program you must:

1. Install smoke alarms properly. Carefully follow **ALL** the instructions in this manual. Keep your smoke alarms clean, and test them every week.

SMOKE ALARMS THAT DO NOT WORK WILL NOT ALERT YOU.

2. Replace your smoke alarms immediately if they are not working properly.
3. Follow fire safety rules, and prevent hazardous situations:
   - Use smoking materials properly. Never smoke in bed.
   - Keep matches and cigarette lighters away from children.
   - Store flammable materials in proper containers. Never use them near an open flame or sparks.
   - Keep electrical appliances and wiring in good condition. Do not overload electrical circuits.
   - Keep cookers, fireplaces, chimneys, and barbecue grills grease free. Make sure they are properly installed, away from any combustible materials.

- Keep portable heaters and open flames such as candles away from combustible materials.
- Do not allow rubbish to accumulate inside your home as this provides sources for combustion.
- Keep a supply of extra batteries on hand for any battery powered smoke alarms which have replaceable batteries.
- Develop a family escape plan and practice it with everyone in the household, including small children if you have them.
- Draw a floor plan of your home, and find two ways to exit from each room. There should be one way to get out of each bedroom without opening the door, and alternate means of escape from an upper floor in the event of the stairs being blocked (such as a fire escape).
- Make sure everyone recognises the smoke alarm signal and knows how to react toit.
- If there are small children to consider it is important to explain to them what the smoke alarm signal means. Teach them that they must be prepared to leave the home by themselves if necessary. Show them how to check to see if doors are hot before opening them. Show them how to stay close to the floor and crawl if necessary. Show them how to use an alternative exit if the door is hot and should not be opened.
- Decide on a meeting place a safe distance from your house. Again, if you have them, make sure that all your children understand that they should go and wait for you there if there is a fire.
- Hold fire drills at least every 6 months to make sure that everyone, including small children, know what to do to escape safely.
- Know where to go to call the Fire and Rescue service from outside your home. Contact your local Fire and Rescue Service. They will give you more ideas about how to make your home safer from fires and how to plan your family's escape.

Smoke alarms are design to protect you and your family from fire. They are not designed to protect you from the poisonous gas Carbon Monoxide which will be created by the incomplete combustion of any fossil fuel. It is highly recommended that you install Carbon Monoxide alarms in your home.

See **www.fireangel.co.uk** for further information

WARRANTY

Sprue Safety Products Ltd warrants to the original purchaser that its enclosed smoke alarm be free from defects in materials and workmanship under normal residential use and service for a period of 5 (five) years from the date of purchase. Provided it is returned with postage prepaid and proof of purchase date, Sprue Safety Products Ltd hereby warrants that during the 5 (five) year period commencing from the date of purchase Sprue Safety Products Ltd, at its discretion, agrees to replace the unit free of charge. The warranty on any replacement WST-630 alarm, will last for the remainder of the period of the original warranty in respect of the alarm originally purchased – that is from the date of original purchase and not from the date of receipt of the replacement product. Sprue Safety Products Ltd reserves the right to offer an alternative product similar to that being replaced if the original model is no longer available or in stock. This warranty applies to the original retail purchaser from the date of original retail purchase and is not transferable. Proof of purchase is required. This warranty does not cover damage resulting from accident, misuse, disassembly, abuse or lack of reasonable care of the product, or applications not in accordance with the user manual. It does not cover events and conditions outside of Sprue Safety Products Ltd's control, such as Acts of God (fire, severe weather etc.). It does not apply to retail stores, service centres or any distributors or agents. Sprue Safety Products Ltd will not recognise any changes to this warranty by third parties.

Sprue Safety Products Ltd shall not be liable for any incidental or consequential damages caused by the breach of any expressed or implied warranty. Except to the extent prohibited by applicable law, any implied warranty of merchantability or fitness for a particular purpose is limited in duration for 5 (five) years. This warranty does not affect your statutory rights. Except for death or personal injury, Sprue Safety Products Ltd shall not be liable for any loss of use, damage, cost or expense relating to this product or for any indirect or consequential loss, damages or costs incurred by you or any other user of this product.

RETURNS

We recommend that you contact the FireAngel Technical Support Line in the first instance on **0800 141 2561**, text phone users dial **18001 0800 141 2561** or callers from EIRE dial **1-800 523171**. We may be able to remedy the problem quickly over the phone (this is to prevent unnecessary returns that take a longer time to process). Alternatively e-mail: **technicalsupport@fireangel.co.uk**

If there is a fault that we are unable to resolve then our technical support team member will provide you with a returns authority number so that your product can be returned for testing. To return your FireAngel smoke alarm under warranty, send it suitably packed with the power pack deactivated (i.e. disconnect from mounting plate) with postage prepaid; a note indicating the returns authority number and describing the reason for return, with proof of purchase to:

Sprue Safety Products Ltd.
Vanguard Centre
Sir William Lyons Road
Coventry CV4 7EZ UK

PRODUCT RANGE

FireAngel Ltd. manufactures an extensive range of home safety products including smoke alarms, carbon monoxide alarms, fire extinguishers and remote sounding devices.

For more details visit www.fireangel.co.uk

NOTES

Technical Support Line
0800 141 2561
UK Textphone users dial **18001 0800 141 2561**
EIRE dial **1-800 523171**

Email
technicalsupport@fireangel.co.uk

Web
www.fireangel.co.uk

CE
12
0832-CPD-1926
Smoke alarm devices
EN 14604:2005

EN 301489-1 v1.6.1 (2005-09)
EN 301489-3 v1.4.1 (2002-08)
EN 300220-2 v2.3.2 (2010-12)

WST-630
GN1794 / R2

A Sprue Safety Products Brand

LPCB
651d/12

Sprue Safety Products Ltd.
Vanguard Centre, Sir William Lyons Road, Coventry CV4 7EZ UK